



FOR IMMEDIATE RELEASE

RE2, Inc. Awarded Semi-Autonomous Manipulation System SBIR

PITTSBURGH, PA – May 24, 2010 – RE2, Inc., a leading developer of intelligent modular manipulation systems, announced today that it has been awarded a Phase I SBIR with the U.S. Army Tank and Automotive Research, Development and Engineering Center (TARDEC) to design sensing and control technologies for semi-autonomous manipulation. These technologies represent the next step in the evolution of robotic manipulation – from tele-operation to more advanced semi-autonomous operations.

The manipulator technologies on existing mobile robots used by military and bomb squads today are still rather primitive in terms of their control and sensing. Operators are required to control each individual joint, usually just one at a time, resulting in a slow and tedious process to position the end-effector at a desired location in order to grasp an object of interest. Additionally, operators typically do not have direct visual line-of-sight to the robot's working area, forcing the operator to rely on imagery from one or more robot-mounted cameras.

During the six-month Phase I effort, RE2 plans to design a complete Semi-Autonomous Manipulation System (SMS), consisting of a dexterous manipulator, intelligent end-effectors, a single camera-based visual tracking system, and intuitive graphical and speech command user interfaces. RE2 plans to partner with Think-A-Move, Ltd. to investigate the feasibility of integrating speech command and control for semi-autonomous manipulation procedures.

“The primary benefit of the SMS is a significant decrease in the cognitive burden and attention that is required by the operator when controlling the manipulator during Explosive Ordnance Disposal (EOD) and other outdoor, unstructured mission environments, especially missions with tedious and repetitive tasks, thereby decreasing overall mission duration and increasing operator safety,” stated Patrick Rowe, Ph.D., vice president of R&D for RE2, Inc.

About RE2, Inc.

RE2 is a leading developer of Intelligent Modular Manipulation Systems. RE2's mission is to advance the state of the art of mobile manipulation. RE2's manipulation systems and components are scalable and modular. RE2's development efforts are focused on creating plug-n-play manipulation systems and end-effectors that are interoperable with existing and next-generation robotic platforms. RE2's systems include the RE2 AUTOMATIC tool change system, Small Robot Toolkit, Dexterous Manipulation System, End-Effector Retrofit Kit, and the ForeRunner UGV. For more information, please visit www.resquared.com or call (412) 681-6382.

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